ENTOMOLOGIST'S RECORD, VOL. 97 A NEW SPECIES OF MEGASELIA RONDANI (DIPTERA: PHORIDAE) FROM NORTHERN BRITAIN

By R. H. L. DISNEY*

Megaselia eccoptomera Schmitz is readily distinguished from related species by the excavation of the basal guarter of the ventral margin of the hind femur and the comb of spines situated at the end of the concave length of this margin (Fig. 1). I have now found that I have been mixing up a second species with M. eccoptomera. This second species possesses a similarly modified hind femur (Fig. 2), but differs in details of the male hypopygium and other features. It has proved to be new to science and is, therefore, described below.

Megaselia gartensis sp.n.

d Frons broader than high and dark. Upper supra-antennals shorter and much thinner than pre-ocellar bristles. Lower supraantennals shorter and much thinner than uppers. Antials slightly below upper supra-antennals and antero-laterals, and clearly closer to latter. Third antennal segment and arista dark, Palps brownish and with 5-6 stout bristles. Labella somewhat expanded, densely spinose below and with a dark band above each side.

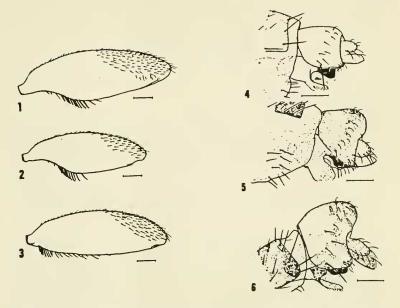
Thorax entirely dark. Anterior scutellars reduced to hairs no larger than those on humeri. Three bristles on notopleuron. Mesopleuron with 3-10 hairs (mean = 6).

Abdomen with dark tergites and brownish venter. The latter with conspicuous hairs on segments 3-6. Hypopygium entirely dark and as in Fig. 4.

Legs entirely dark, apart from paler fore tibia and metatarsus. Ratios of lengths of fore-tarsus segments 2.5:1:0.7:0.7:1, the last segment being wider than the preceeding four segments. Hind femur as Fig. 2. Hind tibia with dorsal hair palisade strongly deflected onto anterior face in distal quarter.

Wing with costal index of 0.46 - 0.51. Costal ratios 2.8 - 3.5: 1.9 - 2.4: 1. Costal cilia 0.12 - 0.15 mm. Wing length 1.4 - 1.9(mean 1.7) mm. All veins brownish and membrane greyish. Sc clearly ends well before RI. Axillary ridge with 3-5 (2 with 3, 5 with 4, 6 with 5) bristles. Vein 3 with a hair at base in all except one specimen (n = 13). Haltere with stem and knob dark, not known apart from a gynandromorph specimen. This has a somewhat distorted male hypopygium but dissection revealed ovaries not testes.

*Field Studies Council Research Fellow, Department of Zoology, University of Cambridge, CB2 3EJ.



Figures. 1-3. Posterior face of hind femur: 1. Megaselia eccoptomera Schmitz. 2. Megaselia gartensis sp. n. 3. Megaselia coccyx Schmitz. Scale lines = 0.1mm.

Figs 4-6. Male hypopygium viewed from left side: 4. *Megaselia gartensis*. 5. *Megaselia eccoptomera*. 6. *Megaselia coccyx*. Scale lines = 0.1mm.

Holotype σ , Loch Garten, Inverness (Grid ref. 28/9818), May 1981, J. A. Owen. Deposited in collection of author.

Paratypes. 2 σ same data as holotype. 10 σ 1 \circ Malham Tarn Estate, North Yorkshire (Grid refs. 34/889672 and 34/893672) May and June 1984, R. H. L. Disney. All deposited in collection of author.

Affinities. In the keys of Schmitz and Beyer (1965) *M. gartensis* runs to *M. eccoptomera*. The latter is a slightly larger species. In British specimens the wing length exceeds 2mm. This size difference is reflected in numerous other measurements, such as the length of the hind femur (cf Figs 1 and 2). However the easiest means of separating the two species is by the form of the epandrium. In *M. eccoptomera* the dorsal-posterior region projects above the anal tube (Fig. 5), unlike the situation in *M. gartensis* (Fig. 4). *M. coccyx* Schmitz has a similar, but more marked, modification of the epandrium (Fig. 6). However it has no excavation of the base of the hind femur (Fig. 3). *M. coccyx* has only recently been added to the British List (Disney 1984). In *M. sordida* (Zetterstedt) the epandrium is also somewhat developed postero-dorsally but less than in

15.xi.1985

M. coccyx and *M. eccoptomera*. Its hind femur is similar to that of *M. coccyx*.

Acknowledgements

I am grateful to Dr. A. G. Irwin who gave me the Phoridae collected by Dr. J. A. Owen.

References

Disney, R. H. L., 1984. Seven species of scuttle fly (Diptera :Phoridae) from Scotland – New to British List. Glagow Nat. 20: 415-419.

Schmitz, H. and Beyer, E., 1965. In Lindner, E. (Ed.). Die Fliegen der palaearktischen Region 33, Phoridae. Lief. 258: 513-560.

MIGRATING CYNTHIA CARDUI IN TUSCANY. – My wife and 1 arrived at the Villa San Girolamo, run by La Piccola Compagna di Santa Maria, at Fiesole, on April 12th, 1985. The Villa has about 15 acres of olive trees, with ground rich in wild flowers, and we were distressed to see the enormous damage suffered by the olive trees in the unprecedented cold spell in January of this year. On April 13th I went into the olive groves to see what butterflies were to be observed, and it was obvious at once that a very large migration of painted ladies was going on. The groves were swarming with them. They appeared to be being held back by northerly winds, as soon as these dropped on April 18th they thinned out rapidly.

Otherwise the most interesting butterflies seen were the two swallowtails, *P. machaon* (one only) and *I. podalirius*. The latter (several seen) had the habit of flying back and forth over the same piece of ground in a fearless and leisurely manner, making observation easy. J. L. CAMPBELL, Isle of Canna.

DEILEPTENIA RIBEATA CLERCK (SATIN BEAUTY) AT BLAIR-GOWRIE, PERTHSHIRE – Two specimens of this moth were caught in the Rothamsted Insect Survey light trap at Kindrogan Field Centre, Blairgowrie, Perthshire (Site No. 48, O.S. ref. No. 055 630) during 1984 (8/9 and 10/11 July). This species is very locally distributed in Scotland, having only been previously recorded from Ayrshire, Kirkcudbrightshire, Stirlingshire, Dumbartonshire (Skinner, pers. comm.) and Peebleshire (Riley, *Ent. Rec.* 97: 111). This record therefore constitutes an extension of it's known range.

Thanks are extended to Bernard Skinner for his advice on this species and to our trap operator at Kindrogan Field Centre, Miss Lynette Borradaile. — ADRIAN M. RILEY Rothamsted Insect Survey, Entomology Department, Rothamsted Experimental Station, Harpenden, Herts.